

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0117765; AI 41403; PER20080002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Oak Harbor East Utility, LLC
Oak Harbor East Sewer Treatment Plant
500 Lakeshore Blvd North
Slidell, LA 70461
- II. PREPARED BY:** Rachel Davis
- DATE PREPARED:** May 1, 2009
- III. PERMIT ACTION:** reissue LPDES permit LA0117765, AI 41403; PER20080002

LPDES application received: November 24, 2008

EPA has not retained enforcement authority.
LPDES permit issued: April 1, 2004
LPDES permit expired: March 31, 2009

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving the Lakeshore Estates Subdivision, Lakeshore Village Subdivision, East St. Tammany Events Center, Bank, convenience store and office buildings.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 500 Lakeshore Blvd North in Slidell, St. Tammany Parish.
- D. The treatment facility consists of a sewage treatment plant with a bar screen, aeration basins, clarifiers, aerobic sludge digesters, gravity sand filters and chlorine contact basin with gas chlorinator.
- E. Outfall 001

Discharge Location: Latitude 30° 13' 10" North
Longitude 89° 46' 30" West

Description: treated sanitary wastewater

Expected Flow: **PHASE I:** (138 homes x 400 GPD) + (110 One-Bedroom Apartments x 250 GPD) + (244 Two-Bedroom Apartments x 300 GPD) + (60 Three-Bedroom Apartments) = 0.179 MGD

PHASE II: (200 homes x 400 GPD) + (110 One-Bedroom Apartments x 250 GPD) + (470 Two-Bedroom Apartments x 300 GPD) + (170 Three-Bedroom Apartments x 350 GPD)
= 0.3165 MGD

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Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Type of Flow Measurement which the facility is currently using:
Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

The discharge is into Canal No. 7, thence into a drainage pumping station, thence into Lake Pontchartrain in segment 041002 of the Lake Pontchartrain Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 041002 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

| Degree of Support of Each Use | | | | | | |
|-------------------------------|------------------------------|--------------------------------|------------------------------------|-----------------------|------------------------|-------------|
| Primary Contact Recreation | Secondary Contact Recreation | Propagation of Fish & Wildlife | Outstanding Natural Resource Water | Drinking Water Supply | Shell fish Propagation | Agriculture |
| Full | Full | Full | N/A | N/A | Full | N/A |

^{1/}The designated uses and degree of support for Segment 041002 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 041002 of the Lake Pontchartrain Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit

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decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Davis
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

Subsegment 041002, Lake Pontchartrain- East of LA Hwy 11 Bridge, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

OUTFALL 001

Phase I limits shall become effective on the effective date of the permit and expire when the flow of the facility reaches over the design capacity of 0.250 GPD.

| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Daily Max. | Basis |
|-------------------------|-------------------------|--------------|------------|--|
| CBOD ₅ | 20.9 | 10 mg/l | 15 mg/l | Limits are set in accordance with the St. Tammany Areawide Policy for facilities of this treatment type and size |
| TSS | 31.3 | 15 mg/l | 23 mg/l | Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |

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| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Daily Max. | Basis |
|-------------------------|-------------------------|--------------|------------|--|
| Oil and Grease | | | 15 mg/l | Limits are set in accordance with the Statewide Sanitary Effluent Limitation Policy (SSELP) for facilities of this treatment type and size |
| Ammonia-Nitrogen | | 5 mg/l | 10 mg/l | Limits are set in accordance with the St. Tammany Areawide Policy for facilities of this treatment type and size |

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Phase II limits shall become effective after the expected flow from the facility reaches over the 0.250 GPD and expire on the expiration date of the permit.

| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Daily Max. | Basis |
|-------------------------|-------------------------|--------------|------------|--|
| CBOD ₅ | 26.4 | 10 mg/l | 15 mg/l | Limits are set in accordance with the St. Tammany Areawide Policy for facilities of this treatment type and size |
| TSS | 39.6 | 15 mg/l | 23 mg/l | Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |
| Oil and Grease | | | 15 mg/l | Limits are set in accordance with the Statewide Sanitary Effluent Limitation Policy (SSELP) for facilities of this treatment type and size |

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| Effluent Characteristic | Monthly Avg. (lbs./day) | Monthly Avg. | Daily Max | Basis |
|-------------------------|----------------------------|--------------|-----------|--|
| Ammonia-Nitrogen | | Report | Report | Limits are set in accordance with the St. Tammany Areawide Policy for facilities of this treatment type and size |

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C)

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0117765: Issued: April 1, 2004
Expired: March 31, 2009

| Effluent Characteristic | Discharge Limitations | | Monitoring Requirements | |
|-------------------------|-----------------------|-------------|-------------------------|-------------|
| | Monthly Avg. | Weekly Avg. | Measurement Frequency | Sample Type |
| Flow | Report | Report | Continuous | Recorder |
| CBOD ₅ | 10 mg/l | 15 mg/l | 2/month | Grab |
| TSS | 15 mg/l | 23 mg/l | 2/month | Grab |
| Oil & Grease | --- | 15 mg/l | 2/month | Grab |
| Ammonia-Nitrogen | Report | Report | 2/month | Grab |
| Fecal Coliform Colonies | 200 | 400 | 2/month | Grab |

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates that no inspections have been performed at this facility in the past two years

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B) Compliance and/or Administrative Orders

A review of the files indicates that no compliance orders have been issued to the facility in the past two years

C) DMR Review

A review of the discharge monitoring reports for the period beginning **March 2007** through **March 2009** has revealed no violations.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.283 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD: } 8.34 \text{ lb/gal} \times 0.25 \text{ MGD} \times 10 \text{ mg/l} = 20.9 \text{ lb/day}$$

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At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** shall remain as previously permitted:

| <u>Effluent Characteristics</u> | <u>Monitoring Requirements</u> | |
|---------------------------------|--------------------------------|---------------|
| | <u>Measurement</u> | <u>Sample</u> |
| Flow | Continuous | Recorder |
| CBOD ₅ | 2/month | Grab |
| Total Suspended Solids | 2/month | Grab |
| Oil & Grease | 2/month | Grab |
| Ammonia-Nitrogen | 2/month | Grab |
| Fecal Coliform Bacteria | 2/month | Grab |
| pH | 2/month | Grab |

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Oak Harbor East Utility, LLC, Oak Harbor East Sewer Treatment Plant, November 24, 2008.